WHAT IS CLAIMED IS:

1. An illuminating device, comprising:

a light source in which solid light-emitting elements are arranged in an array shape; and

an integrating means for integrating and guiding light emitted from each solid light-emitting element to an object to be illuminated.

2. An illuminating device according to claim 1, wherein lens cells are arranged on a light-emission side of respective solid light-emitting elements.

3. An illuminating device according to claim 2, wherein said lens cells are integrally molded by a resin that molds respective solid light-emitting elements, or are formed independently of said molding resin, and have a layer of resin interposed between the lens cells and the molding resin.

4. An illuminating device according to claim 2 or 3, wherein

said lens cells are arranged separately from one another in such a manner as to have wall surfaces, and said wall surfaces serve as reflective surfaces.

5. An illuminating device according to claim 4, wherein a reflector is interposed in each of said wall surfaces arranged separately between the lens cells.

6. An illuminating device according to any one of claims 2 to 5, wherein said integrating means is formed of a first lens cluster that receives and condenses light and a second lens cluster provided on condensing points, and said lens cells are configured to guide light emitted from the solid light-emitting elements to said first lens cluster.

7. An illuminating device according to claim 6, wherein said lens cells and said first lens cluster are adhered to each other.

8. An illuminating device according to any one of claims 2 to 5, wherein

said lens cells are configured to condense the light from the solid light-emitting elements, and said integrating means is formed to be provided with a lens cluster arranged on condensing points of light passed through said lens cells.

9. An illuminating device according to any one of claims 6 to 8, wherein each of the solid light-emitting elements, each of the lens cells, and each of the lenses in the lens cluster correspond to one another.

10. An illuminating device according to any one of claims 6 to 9, wherein

a polarization conversion system in which polarizing beam splitters are arranged in an array shape is provided on a light-exit side of said integrating means.

11. An illuminating device according to claim 10, wherein

said polarizing beam splitters have a square pole shape, and a longitudinal direction thereof coincides with a longitudinal direction of the solid light-emitting elements.

12. An illuminating device according to any one of claims 2 to 11, wherein an aspect ratio of each lens in the lens clusters in said integrating means coincides or approximately coincides with an aspect ratio of an object to be illuminated.

13. An illuminating device according to any one of claims 2 to 12, wherein an aspect ratio of each of said lens cells coincides or approximately coincides with the aspect ratio of the object to be illuminated.

14. An illuminating device according to any one of claims 1 to 13, wherein an aspect ratio of each solid light-emitting element coincides or approximately coincides with the aspect ratio of the object to be illuminated.

15. An illuminating device according to any one of claims 1 to 11, comprising an anamorphic lens, wherein an aspect ratio of a light flux guided to the anamorphic lens is different from the aspect ratio of the object to be illuminated, and an aspect ratio of the

light flux given off from the anamorphic lens coincides or approximately coincides with the aspect ratio of the object to be illuminated.

16. An illuminating device according to any one of claims 1 to 5, wherein said integrating means is formed of a rod integrator.

17. An illuminating device according to claim 16, wherein an aspect ratio of a light-exit surface of said rod integrator coincides or approximately coincides with an aspect ratio of the object to be illuminated.

18. An illuminating device according to claim 16, comprising an anamorphic lens on a side of the light-exit surface of said rod integrator, wherein an aspect ratio of the light-exit surface of said rod integrator is different from an aspect ratio of an object to be illuminated, and an aspect ratio of a light flux given off from the anamorphic lens coincides or approximately coincides with the aspect ratio of the object to be illuminated.

19. An illuminating device, comprising:

a light source formed by arranging a plurality of laser diodes that are solid light-emitting elements;

an integrating means for integrating and guiding light emitted from said laser diodes to an object to be illuminated, and

a phase-shift means for rendering phases of light emitted from said laser diodes non-uniform one another.

20. An illuminating device according to claim 19, wherein the phase-shift means is formed of a plurality of plane-table transparent portions, respectively having different thicknesses and being arranged on respective optical paths of the lights emitted from laser diodes.

21. An illuminating device according to claim 19, wherein the phase-shift means is

formed of a plurality of plane-table transparent portions, respectively having different dielectric constants, and being arranged on the respective optical paths of the lights emitted from laser diodes.

22. An illuminating device according to claim 20 or 21, wherein an aspect ratio of said plane-table transparent portion coincides or approximately coincides with the aspect ratio of the object to be illuminated.

23. An illuminating device according to claim 20 or 21, comprising an anamorphic lens, wherein an aspect ratio of a light flux guided to the anamorphic lens is different from the aspect ratio of the object to be illuminated, and an aspect ratio of the light flux given off from the anamorphic lens coincides or approximately coincides with the aspect ratio of the object to be illuminated.

24. An illuminating device according to claim 19, wherein the phase-shift means is a tapered-shaped optical element arranged on an optical path of a laser beam emitted from said laser diode.

25. An illuminating device, comprising:

a light source formed by arranging a plurality of laser diodes that are solid light-emitting elements;

an integrating means for integrating and guiding laser beams emitted from said laser diodes to an object to be illuminated; and

a light diffusing means for diffusing the laser beams emitted from said laser diodes.

26. An illuminating device according to claim 25, wherein the light diffusing means is an optical element having minute unevenness.

27. An illuminating device, comprising:

a light source formed by arranging a plurality of solid light-emitting elements; and

an integrating means for receiving light emitted from each solid light-emitting element, and integrating and guiding each of the lights received at a plurality of portions on a light receiving area to an object to be illuminated.

28. An illuminating device according to claim 27, wherein said integrating means is formed of a lens cluster, and said lens cluster receives light emitted from one solid light-emitting element.

29. An illuminating device according to claim 28, wherein an aspect ratio of each lens in the lens cluster in said integrating means coincides or approximately coincides with the aspect ratio of the object to be illuminated.

30. An illuminating device according to claim 28, comprising an anamorphic lens, wherein an aspect ratio of a light flux guided to the anamorphic is different from the aspect ratio of the object to be illuminated, and an aspect ratio of the light flux given off from the anamorphic lens coincides or approximately coincides with the aspect ratio of the object to be illuminated.

31. An illuminating device, comprising:

a light source formed by arranging a plurality of solid light-emitting elements each of which has different light-emitting intensity distribution; and

an integrating means for integrating and guiding light emitted from each solid light-emitting element to an object to be illuminated.

32. An illuminating device, comprising;

a light source formed by arranging a plurality of solid light-emitting elements;

an intensity distribution conversion means for receiving light emitted from each solid light-emitting element and giving off the light after converting intensity distribution of the light; and

an integrating means for integrating and guiding light given off from each intensity

distribution conversion means to an object to be illuminated.

33. An illuminating device, comprising,

a light source formed by arranging a plurality of solid light-emitting elements, and

an integrating means for integrating and guiding light emitted from each solid light-emitting element to an object to be illuminated in respectively different condensing patterns.

34. A projection type video display according to claim 31, wherein solid light-emitting elements of two-point light-emitting are provided.

35. An illuminating device according to any one of claims 25 to 34, comprising laser diodes as the solid light-emitting elements, wherein the object to be illuminated is a liquid crystal display panel, and a linear polarization direction of laser diodes coincides or approximately coincides with a polarization direction of the liquid crystal display panel.

36. An illuminating device according to any one of claims 25 to 35, comprising the laser diodes as the solid light-emitting elements, wherein a longitudinal direction of an elliptical light emitted from the laser diodes coincides or approximately coincides with a longitudinal direction of the object to be illuminated.

37. An illuminating device according to any one of claims 25 to 36, comprising the laser diodes as said solid light-emitting elements, wherein an aspect ratio of an optical element in an optical system that guides the light emitted from the laser diodes to said object to be illuminated coincides or approximately coincides with an aspect ratio of said object to be illuminated, and a longitudinal direction of an elliptical light emitted from said laser diodes coincides or approximately coincides with a longitudinal direction of said optical element.

38. An illuminating device, wherein a plurality of solid light-emitting elements are

three-dimensionally arranged in a mirror surface cylinder, one surface of which is a light-exit surface and inner sides of other surfaces of which are reflective surfaces, and light emitted from said solid light-emitting elements is integrated by said reflective surfaces and given off from said light-exit surface.

39. An illuminating device according to claim 38, the mirror surface cylinder is in a shape of a rectangular tubular body.

40. An illuminating device according to claim 39, an aspect ratio of said light-exit surface coincides or approximately coincides with an aspect ratio of an object to be illuminated.

41. An illuminating device according to any one of claims 38 to 40, wherein said mirror surface cylinder is formed in a tapered shape, and an area of the light-exit surface is larger than that of a surface opposite to the light-exit surface.

42. An illuminating device, comprising a diffraction optical element portions having a collimating function or a condensing function on a light-emission side of a solid light-emitting element.

43. An illuminating device, comprising a hologram optical element portion having a collimating function or a condensing function on a light-emission side of a solid light-emitting element.

44. An illuminating device, wherein a plurality of solid light-emitting elements are two-dimensionally or three-dimensionally arranged, and a polarization conversion element is provided on a light-emission side of each solid light-emitting element.

45. An illuminating device according to any one of claims 1 to 44, comprising a transmission type liquid crystal display having no micro lens as an object to be illuminated.

46. A projection type video display, comprising the illuminating device according

to any one of claims 1 to 45.